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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,662	10/02/2003	Gideon Dreyfuss	053893-5027-01	9955

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DRINKER BIDDLE & REATH
ATTN: INTELLECTUAL PROPERTY GROUP
ONE LOGAN SQUARE
18TH AND CHERRY STREETS
PHILADELPHIA, PA 19103-6996

EXAMINER	
BUNNER, BRIDGET E	
ART UNIT	PAPER NUMBER
1647	
MAIL DATE	DELIVERY MODE
10/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/677,662	DREYFUSS ET AL.	
	Examiner	Art Unit	
	Bridget E. Bunner	1647	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *107* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *107* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Application, Amendments and/or Claims

The amendment of 09 July 2007 has been entered in full. Claims 1-106 are cancelled. Claim 107 is amended.

Claim 107 is under consideration in the instant application.

Withdrawn Objections and/or Rejections

1. The objections to the specification at page 2 of the previous Office Action (09 January 2007) are *withdrawn* in view of the specification (09 July 2007).

2. The rejections to claims 10, 12, 102, 104, 106, and 107 under 35 U.S.C. 112, second paragraph, as set forth at page 3 of the previous Office Action (09 January 2007) are *withdrawn* in view of amended claim 107 and cancelled claims 10, 12, 102, 104, and 106 (09 July 2007).

4. The rejections of claims 8-13 and 102-106 under 35 U.S.C. § 112, first paragraph (enablement and written description) as set forth at pages 4-11 of the previous Office Action (09 January 2007) are *withdrawn* in view of the cancelled claims (09 July 2007).

5. The rejection of claims 8-13 and 102-106 under 35 U.S.C. § 103(a) as set forth at pages 11-13 of the previous Office Action (09 January 2007) is *withdrawn* in view of the cancelled claims (09 July 2007).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference

claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 107 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,646,113 in view of Uckun et al. (U.S. Patent 6,160,010). Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are directed to an isolated nucleic acid encoding a human Survival of Motor Neuron-Interacting Protein 1, wherein said nucleic acid encodes a polypeptide comprising SEQ ID NO:2 that differs from the amino acid sequence of SEQ ID NO: 2 by a mutation that inhibits binding of Survival Motor Neuron-Interacting Protein 1 with Survival Motor Neuron protein, wherein said mutation is selected from the group consisting of a deletion of the carboxyl terminal 89 amino acids relative to the amino acid sequence of SEQ ID NO:2 and a deletion of the carboxyl 162 amino acids relative to the amino acid sequence of SEQ ID NO: 2. The instant claim recites that the nucleic acid further comprises a nucleic acid encoding a tag polypeptide covalently linked thereto. Claim 1 of the '113 patent does not recite that the nucleic acid further comprises a nucleic acid encoding a flag polypeptide.

However, Uckun et al. teach that cDNAs encoding full length Bruton's tyrosine kinase (BTK) and its kinase or PH domains are cloned into the *E. coli* expression vector pMALC2 with

the IPTG-inducible ptac promoter to create a fusion between these coding sequences and the 3' end of the *E. coli* malE gene, which codes for maltose binding protein (col 19, lines 7-14). Uckun et al. also disclose that cDNAs encoding the SH2, SH3, or SH2+SH3 domains of BTK are cloned into the *E. coli* expression vector pGEX-2t with the IPTG-inducible ptac promoter to create a fusion between these coding sequences and the 3' end of the *E. coli* glutathione S-transferase (GST) gene (col 19, lines 14-19). Furthermore, Uckun et al. teach that DT40 cells are transfected with BTK-MBP DNA (col 19, lines 45-51; col 20, lines 34-60).

It would have been obvious to the person of ordinary skill in the art at the time the invention was made to modify the SIP1 nucleic acid sequence of '113 by generating a tag fusion nucleic acid and expression system as taught by Uckun et al. The person of ordinary skill in the art would have been motivated to make that modification to allow for the expression of the SIP1 polynucleotide and subsequent isolation, identification, or localization of the protein of interest. The person of ordinary skill in the art reasonably would have expected success because similar vector-host cell systems and tag-nucleic acid fusions were already being generated using other protein sequences at the time the invention was made. Therefore, the instant claim is not patentably distinct over the issued claim in U.S. patent 6,646,113 in view of Uckun et al.

Conclusion

Claim 107 is not allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bridget E. Bunner whose telephone number is (571) 272-0881. The examiner can normally be reached on 8:30-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao can be reached on (571) 272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BEB
Art Unit 1647
25 September 2007

Bridget E. Bunner

BRIDGET E. BUNNER
PRIMARY EXAMINER